## SEQUENCE LISTING

Brockhaus, et al.

<120> Human TNF Receptor

<130> 01017/40451B

<140> US 08/444,790

<141> 1995-05-19

<160> 26

<170> PatentIn version 3.3

<210> 1

<211> 2111

<212> DNA <213> Homo sapiens

<400> 1

gaattcgggg	gggttcaaga	tcactgggac	caggccgtga	tctctatgcc	cgagtctcaa	60
ccctcaactg	tcaccccaag	gcacttggga	cgtcctggac	agaccgagtc	ccgggaagcc	120
ccagcactgc	cgctgccaca	ctgccctgag	cccaaatggg	ggagtgagag	gccatagctg	180
tctggcatgg	gcctctccac	cgtgcctgac	ctgctgctgc	cgctggtgct	cctggagctg	240
ttggtgggaa	tatacccctc	aggggttatt	ggactggtcc	ctcacctagg	ggacagggag	300
aagagagata	gtgtgtgtcc	ccaaggaaaa	tatatccacc	ctcaaaataa	ttcgatttgc	360
tgtaccaagt	gccacaaagg	aacctacttg	tacaatgact	gtccaggccc	ggggcaggat	420
acggactgca	gggagtgtga	gagcggctcc	ttcaccgctt	cagaaaacca	cctcagacac	480
tgcctcagct	gctccaaatg	ccgaaaggaa	atgggtcagg	tggagatete	ttcttgcaca	540
gtggaccggg	acaccgtgtg	tggctgcagg	aagaaccagt	accggcatta	ttggagtgaa	600
aaccttttcc	agtgcttcaa	ttgcagcctc	tgcctcaatg	ggaccgtgca	cctctcctgc	660
caggagaaac	agaacaccgt	gtgcacctgc	catgcaggtt	tctttctaag	agaaaacgag	720
tgtgtctcct	gtagtaactg	taagaaaagc	ctggagtgca	cgaagttgtg	cctaccccag	780
attgagaatg	ttaagggcac	tgaggactca	ggcaccacag	tgctgttgcc	cctggtcatt	840
ttctttggtc	tttgcctttt	atccctcctc	ttcattggtt	taatgtatcg	ctaccaacgg	900
tggaagtcca	agctctactc	cattgtttgt	gggaaatcga	cacctgaaaa	agagggggag	960
cttgaaggaa	ctactactaa	gcccctggcc	ccaaacccaa	gcttcagtcc	cactccaggc	1020
ttcaccccca	ccctgggctt	cagtcccgtg	cccagttcca	ccttcacctc	cagctccacc	1080
tatacccccg	gtgactgtcc	caactttgcg	gctccccgca	gagaggtggc	accaccctat	1140
cagggggctg	accccatcct	tgcgacagcc	ctcgcctccg	accccatccc	caaccccctt	1200
cagaagtggg	aggacagcgc	ccacaagcca	cagagcctag	acactgatga	ccccgcgacg	1260

ctgtacqccq tqqtqqaqaa cqtqccccq ttqcqctqqa aqqaattcqt qcqqcqcta 1320 gggctgagcg accacgagat cgatcggctg gagctgcaga acgggcgctg cctgcgcgag 1380 gcgcaataca gcatgctggc gacctggagg cggcgcacgc cgcggcgcga ggccacgctg 1440 gagetgetgg gaegegtget eegegacatg gaeetgetgg getgeetgga ggaeategag 1500 gaggegettt geggeeeege egeeeteeeg eeegegeeea gtetteteag atgaggetge 1560 geceetgegg geagetetaa ggaeegteet gegagatege etteeaacee caetttttte 1620 tggaaaggag gggtcctgca ggggcaagca ggagctagca gccgcctact tggtgctaac 1680 ccctcgatgt acatagettt teteagetge etgegegeeg eegacagtea gegetgtgeg 1740 cgcggagaga ggtgcgccgt gggctcaaga gcctgagtgg gtggtttgcg aggatgaggg 1800 acgetatgee teatgeeegt tttgggtgte etcaceagea aggetgeteg ggggeeeetg 1860 gttegteect gageettitt cacagtgeat aageagittt tittgiittt giittgiitt 1920 gttttgtttt taaatcaatc atgttacact aatagaaact tggcactcct gtgccctctg 1980 cctggacaag cacatagcaa gctgaactgt cctaaggcag gggcgagcac ggaacaatgg 2040 ggccttcagc tggagctgtg gacttttgta catacactaa aattctgaag ttaaaaaaaa 2100 aacccgaatt c 2111

<210> 2

<211> 455

<212> PRT

<213> Homo sapiens

<400> 2

Met Gly Leu Ser Thr Val Pro Asp Leu Leu Leu Pro Leu Val Leu Leu 5 10 15

Glu Leu Leu Val Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu Val Pro 20 25 30

His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro Gln Gly Lys 35 40 45

Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys 50 55 60

Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp 65 70 75 80

Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu 85 90 95

Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val

100 105 110

Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg
115 120 125

Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe 130 135 140

Asn Cys Ser Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu 145 150 155 160

Lys Gln Asn Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu
165 170 175

Asn Glu Cys Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr 180 185 190

Lys Leu Cys Leu Pro Gl<br/>n Ile Glu As<br/>n Val Lys Gly Thr Glu Asp Ser 195 $\phantom{\bigg|}200\phantom{\bigg|}205\phantom{\bigg|}$ 

Gly Thr Thr Val Leu Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu 210 225 220

Leu Ser Leu Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys 225 230 235 240

Ser Lys Leu Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu 245 250 255

Gly Glu Leu Glu Gly Thr Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser
260 265 270

Phe Ser Pro Thr Pro Gly Phe Thr Pro Thr Leu Gly Phe Ser Pro Val 275 280 285

Pro Ser Ser Thr Phe Thr Ser Ser Ser Thr Tyr Thr Pro Gly Asp Cys 290 295 300

Pro Asn Phe Ala Ala Pro Arg Glu Val Ala Pro Pro Tyr Gln Gly 305 310 315

Ala Asp Pro Ile Leu Ala Thr Ala Leu Ala Ser Asp Pro Ile Pro Asn 325 330 335

Pro Leu Gln Lys Trp Glu Asp Ser Ala His Lys Pro Gln Ser Leu Asp 340 345 350

Thr Asp Asp Pro Ala Thr Leu Tyr Ala Val Val Glu Asn Val Pro Pro 355 360 365

Leu Arg Trp Lys Glu Phe Val Arg Arg Leu Gly Leu Ser Asp His Glu 370 380

Ile Asp Arg Leu Glu Leu Gln Asn Gly Arg Cys Leu Arg Glu Ala Gln 385 390 395 400

Tyr Ser Met Leu Ala Thr Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala
405 410 415

Thr Leu Glu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly 420 425 430

Cys Leu Glu Asp Ile Glu Glu Ala Leu Cys Gly Pro Ala Ala Leu Pro 435 440 445

Pro Ala Pro Ser Leu Leu Arg 450 455

<210> 3

<211> 2339

<212> DNA

<213> Homo sapiens

<400> 3

teggacaceg tgtgtgacte etgtgaggac ageacataca eccaqetetq qaaetqqqtt 60 cccgagtgct tgagctgtgg ctcccgctgt agctctgacc aggtggaaac tcaagcctgc 120 actogggaac agaaccgcat otgcacctgc aggcccggct ggtactgcgc gctgagcaag 180 caggagggt gccggctgtg cgcgccgctg ccgaagtgcc gcccqqqctt cqqcqtqqcc 240 agaccaggaa ctgaaacatc agacgtggtg tgcaagccct gtgccccggg gacgttctcc 300 aacacgactt catccacgga tatttgcagg ccccaccaga tctgtaacgt qqtqqccatc 360 cctgggaatg caagcaggga tgcagtctgc acgtccacgt cccccacccg gagtatggcc 420 ccaggggcag tacacttacc ccagccagtg tccacacgat cccaacacac gcagccaagt 480 ccagaaccca gcactgctcc aagcacctcc ttcctgctcc caatgggccc cagccccca 540 gctgaaggga gcactggcga cttcgctctt ccagttggac tgattgtggg tgtgacagcc 600 ttgggtctac taataatagg agtggtgaac tgtgtcatca tgacccaggt gaaaaagaag 660 cccttgtgcc tgcagagaga agccaaggtg cctcacttgc ctqccqataa qqcccqqqqt 720 acacagggcc ccgagcagca gcacctgctg atcacagcgc cgagctccag cagcagctcc 780 ctggagagct cggccagtgc gttggacaga agggcgccca ctcggaacca gccacaggca 840 ccaggcgtgg aggccagtgg ggccggggag gcccgggcca gcaccgggag ctcagcagat 900

tetteceetg gtggecatgg gacceaggte aatgteacet geategtgaa egtetgtage 960 agetetgace acageteaca gtgeteetee caageeaget ceacaatggg agacacagat 1020 tecageceet eggagteece gaaggaegag eaggteeeet tetecaagga ggaatgtgee 1080 tttcggtcac agctggagac gccagagacc ctgctgggga gcaccgaaga gaagcccctg 1140 ccccttggag tgcctgatgc tgggatgaag cccagttaac caggccggtg tgggctgtgt 1200 cgtagccaag gtggctgagc cctggcagga tgaccctgcg aaggggccct ggtccttcca 1260 ggcccccacc actaggactc tgaggctctt tctgggccaa gttcctctag tgccctccac 1320 agcegeagee teectetgae etgeaggeea agageagagg eagegagttg tggaaageet 1380 ctgctgccat ggcgtgtccc tctcggaagg ctggctgggc atggacgttc ggggcatgct 1440 ggggcaagtc cctgagtctc tgtgacctgc cccgcccagc tgcacctgcc agcctggctt 1500 ctggagccct tgggtttttt gtttgtttgt ttgtttgttt gtttgtttct ccccctgggc 1560 tetgeecage tetggettee agaaaacece ageateettt tetgeagagg ggetttetgg 1620 agaggaggga tgctgcctga gtcacccatg aagacaggac agtgcttcag cctgaggctg 1680 agactgcggg atggtcctgg ggctctgtgc agggaggagg tggcagccct gtagggaacg 1740 gggtccttca agttagctca ggaggcttgg aaagcatcac ctcaggccag gtgcagtggc 1800 tcacgcctat gatcccagca ctttgggagg ctgaggcggg tggatcacct gaggttagga 1860 gttcgagacc agcctggcca acatggtaaa accccatctc tactaaaaat acagaaatta 1920 gccgggcgtg gtggcgggca cctatagtcc cagctactca gaagcctgag gctgggaaat 1980 cgtttgaacc cgggaagcgg aggttgcagg gagccgagat cacgccactg cactccagcc 2040 tgggcgacag agcgagagtc tgtctcaaaa gaaaaaaaaa aagcaccgcc tccaaatgct 2100 aacttgtcct tttgtaccat ggtgtgaaag tcagatgccc agagggccca ggcaggccac 2160 catattcagt gctgtggcct gggcaagata acgcacttct aactagaaat ctgccaattt 2220 tttaaaaaag taagtaccac tcaggccaac aagccaacga caaagccaaa ctctgccagc 2280 cacatccaac cocccacctg ccatttgcac cotccgcctt cactccggtg tgcctgcag 2339

Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr Gln Leu 5 10 15

Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys Ser Ser 20 25 , 30

<sup>&</sup>lt;210> 4

<sup>&</sup>lt;211> 392

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;400> 4

Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg Ile Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu Gly Cys Arg Leu Cys Ala Pro Leu Pro Lys Cys Arg Pro Gly Phe Gly Val Ala Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys Ala Pro 90 Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr Asp Ile Cys Arg Pro His Gln Ile Cys Asn Val Val Ala Ile Pro Gly Asn Ala Ser Arg Asp Ala 115 120 125 Val Cys Thr Ser Thr Ser Pro Thr Arg Ser Met Ala Pro Gly Ala Val 130 His Leu Pro Gln Pro Val Ser Thr Arg Ser Gln His Thr Gln Pro Ser Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser Phe Leu Leu Pro Met Gly 165 170 Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly Asp Phe Ala Leu Pro Val Gly Leu Ile Val Gly Val Thr Ala Leu Gly Leu Leu Ile Ile Gly Val 195 200 205 Val Asn Cys Val Ile Met Thr Gln Val Lys Lys Pro Leu Cys Leu Gln Arg Glu Ala Lys Val Pro His Leu Pro Ala Asp Lys Ala Arg Gly 230 235 Thr Gln Gly Pro Glu Gln Gln His Leu Leu Ile Thr Ala Pro Ser Ser Ser Ser Ser Leu Glu Ser Ser Ala Ser Ala Leu Asp Arg Ala Pro Thr Arg Asn Gln Pro Gln Ala Pro Gly Val Glu Ala Ser Gly Ala 275 280

Gly Glu Ala Arg Ala Ser Thr Gly Ser Ser Ala Asp Ser Ser Pro Gly 290 295 Gly His Gly Thr Gln Val Asn Val Thr Cys Ile Val Asn Val Cys Ser 310 315 Ser Ser Asp His Ser Ser Gln Cys Ser Ser Gln Ala Ser Ser Thr Met Gly Asp Thr Asp Ser Ser Pro Ser Glu Ser Pro Lys Asp Glu Gln Val 340 345 Pro Phe Ser Lys Glu Glu Cys Ala Phe Arg Ser Gln Leu Glu Thr Pro Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys Pro Leu Pro Leu Gly Val 370 375 Pro Asp Ala Gly Met Lys Pro Ser 390 <210> 5 <211> 28 <212> PRT <213> Artificial sequence <220> <223> Synthetic peptide <220> <221> misc\_feature <222> (25)..(25) <223> Xaa = unknown amino acid <400> 5 Leu Val Pro His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln Xaa Asn Ser Ile 2.0 25 <210> 6 <211> 15 <212> PRT <213> Artificial sequence <220> <223> Synthetic peptide <400> 6 Ser Thr Pro Glu Lys Glu Gly Glu Leu Glu Gly Thr Thr Lys

10

```
7
<210>
<211> 18
<212>
      PRT
<213> Artificial sequence
<220>
<223>
      Synthetic peptide
<400> 7
Ser Gln Leu Glu Thr Pro Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys
Pro Leu
<210>
       8
<211>
       4
<212>
       PRT
<213> Artificial sequence
<220>
      Synthetic peptide
<223>
<400> 8
Val Phe Cys Thr
<210>
<211>
       16
<212>
<213>
       Artificial sequence
<220>
<223> Synthetic peptide
<400> 9
Asn Gln Pro Gln Ala Pro Gly Val Glu Ala Ser Gly Ala Gly Glu Ala
                5
<210>
       10
<211>
       18
<212>
       PRT
<213> Artificial sequence
<220>
<223>
      Synthetic peptide
<220>
       misc_feature
<221>
<222>
       (8)..(8)
<223>
       Xaa = unknown amino acid
<400> 10
```

```
Leu Pro Ala Gln Val Ala Phe Xaa Pro Tyr Ala Pro Glu Pro Gly Ser
                                    10
Thr Cys
<210> 11
<211>
       13
<212>
       PRT
<213> Artificial sequence
<220>
<223> Synthetic peptide
<220>
<221> misc_feature
<222>
      (2)..(2)
<223> Xaa = unknown amino acid
<400> 11
Ile Xaa Pro Gly Phe Gly Val Ala Tyr Pro Ala Leu Glu
<210> 12
<211>
      PRT
<212>
<213> Artificial sequence
<220>
<223> Synthetic peptide
<400> 12
Leu Cys Ala Pro
<210> 13
<211> 7
<212> PRT
<213> Artificial sequence
<220>
<223> Synthetic peptide
<400> 13
Val Pro His Leu Pro Ala Asp
<210>
       14
<211>
       15
<212> PRT
<213> Artificial sequence
```

<220>

<223> Synthetic peptide

```
. <220>
 <221> misc feature
<222> (9)..(10)
<223> Xaa = unknown amino acid
 <220>
 <221>
       misc feature
 <222>
       (13)...(13)
 <223> Xaa = unknown amino acid
 <400> 14
 Gly Ser Gln Gly Pro Glu Gln Gln Xaa Xaa Leu Ile Xaa Ala Pro
 <210> 15
 <211> 9
 <212> PRT
 <213> Artificial sequence
 <220>
 <223> Synthetic peptide
 <400> 15
Leu Val Pro His Leu Gly Asp Arg Glu
 <210> 16
 <211>
       27
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic primer
 <400> 16
 agggagaaga gagatagtgt gtgtccc
                                                                      27
 <210> 17
 <211> 41
 <212> DNA
 <213> Artificial sequence
 <220>
 <223> Synthetic primer
 <400> 17
aagettggee aggateeage tgaetgaetg ategegagat e
                                                                      41
 <210>
       18
 <211>
       41
 <212>
       DNA
 <213>
       Artificial sequence
 <220>
 <223> Antisense primer
```

<400> gatctc	18 gcga tcagtcagtc agctggatcc tggccaagct t	41
<210><211><212><213>	19 38 DNA Artificial sequence	
<220> <223>	Synthetic primer	
<400> cacaggg	19 gatc catagetgte tggcatggge etetecae	38
<210><211><211><212><213>	20 44 DNA Artificial sequence	
<220> <223>	Antisense primer	
	20 acca gatototatt atgtggtgoo tgagtootoa gtgo	44
<210><211><211><212><213>	21 19 DNA Artificial sequence	
<220> <223>	Synthetic primer	
<400> gatcca	21 gaat tcataatag	19
<210><211><212><212><213>	22 19 DNA Artificial sequence	
<220> <223>	Antisense primer	
<400> gtaccta	22 atta tgaattctg	19
<210><211><212><213>	23 31 DNA Artificial sequence	
<220> <223>	Synthetic primer	
<400>	23 cata atagagatet ggtaceggga a	31

<210>	24	
<211>	25	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	Antisense primer	
<400>	24	
cccggt	acca gatctctatt atgtg	25
<210>	25	
<211>	29	
<212>		
<213>	Artificial sequence	
<220>		
<223>	Synthetic primer	
	25	
tacgag	ctcg gccatagctg tctggcatg	29
<210>	26	
<211>	29	
	DNA	
<213>	Artificial sequence	
<220>		
<223>	Synthetic primer	
<400>	26	
atagag	ctct gtggtgcctg agtcctcag	29